

AMENDMENTS TO THE CLAIMS

1-3. (Cancelled)

4. **(WITHDRAWN-CURRENTLY AMENDED)**: A method for detection of Brucella bacterium in a sample comprising:

(i) providing a sample;

using a PCR assay to detect ~~the composition~~ the set of polynucleotides of claim 8 in the sample, wherein the detection of SEQ ID NO:4 and SEQ ID NO:8 in the sample indicates the presence of Brucella bacterium in the sample.

5. **(WITHDRAWN)**: The method of Claim 4 wherein said PCR comprises standard PCR.

6. **(WITHDRAWN)**: The method of Claim 5, wherein said PCR comprises fluorogenic 5' nuclease PCR assay.

7. **(WITHDRAWN-previously amended)**: The method of claim 4, wherein said assay is performed using a first forward primer consisting of SEQ ID NO:1, a first reverse primer consisting of SEQ ID NO:2, and a first hybridization probe consisting of SEQ ID NO:3 for detection of SEQ ID NO:4 and using a second forward primer consisting of SEQ ID NO:5, a second reverse primer consisting of SEQ ID NO:6, and a second hybridization probe consisting of SEQ ID NO:7 for detection of SEQ ID NO:8.

and detecting the presence of SEQ ID NO:4 and SEQ ID NO:8 by fluorogenic 5' nuclease PCR assay, wherein the presence of SEQ ID NO:4 and SEQ ID NO:8 indicates the presence of Brucella in the sample.

8. **(CURRENTLY AMENDED)** ~~A composition~~ A set of polynucleotides comprising a first isolated polynucleotide and a second isolated polynucleotide, wherein the first isolated polynucleotide consists of SEQ ID NO: 4 or the complement thereof and the second polynucleotide consists of SEQ ID NO: 8 or the complement thereof.

9. **(WITHDRAWN-CURRENTLY AMENDED)** ~~The composition~~ The set of polynucleotides of claim 8, comprising at least one further isolated polynucleotide consisting of

a nucleic acid sequence selected from the group consisting of SEQ ID NOS: 12, 16, 20, and 24 or the complement thereof.

10. **(WITHDRAWN-CURRENTLY AMENDED)** ~~The composition~~ The set of polynucleotides of claim 9, comprising six isolated polynucleotides each consisting of one of SEQ ID NOS: 4, 8, 12, 16, 20, and 24 or the complements thereof.

11. **(CURRENTLY AMENDED)** A set of oligonucleotides comprising (a) a polynucleotide fragment of each of the isolated polynucleotides of ~~the composition~~ the set of polynucleotides of claim 8, ~~wherein said fragments are 19 to 32 nucleotides in length, or (b) the complements of (a).~~ or the complement of (a); wherein said set consists of forward primers and reverse primers and hybridization probes.

12. **(CANCELLED)**

13. **(Previously presented)** The set of oligonucleotides of claim 11, wherein each oligonucleotide consists of one of SEQ ID NOS: 1, 2, 3, 5, 6, and 7.

14. **(WITHDRAWN-CURRENTLY AMENDED)** A set of oligonucleotides comprising (a) a polynucleotide fragment of each of the isolated polynucleotides of ~~the composition~~ set of polynucleotides of claim 10, ~~wherein said fragments are 19 to 32 nucleotides in length, or (b) the complements of (a)~~ wherein said set consists of forward primers and reverse primers and hybridization probes.

15. **(WITHDRAWN)** The set of oligonucleotides of claim 14, wherein each oligonucleotide consists of one of SEQ ID NOS: 1, 2, 3, 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 21, 22, and 23.

16. **(CANCEL)**

17. **(CANCEL)**